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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,006	04/07/2004	Hung-Jen Huang	12530-US-PA	3005

  

31561	7590	10/19/2007
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE		
7 FLOOR-1, NO. 100		
ROOSEVELT ROAD, SECTION 2		
TAIPEI, 100		
TAIWAN		

  

EXAMINER	
MOTSINGER, SEAN T	

  

ART UNIT	PAPER NUMBER
2624	

  

NOTIFICATION DATE	DELIVERY MODE
10/19/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USA@JCIPGROUP.COM.TW

## Office Action Summary

Application No.

10/709,006

Applicant(s)

HUANG ET AL.

Examiner

Sean Motsinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 7/27/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Response to Applicants Amendments/Arguments***

1. The argument and/or amendments to the claims filed on 7/27/2007 have been entered and made of record.
2. Regarding the Objection to the drawings, appliance amendments to the drawings have been considered and it is determined that they overcome the current rejection.
3. Regarding the Rejections to claims 1-2 and 7-8 under 35 U.S.C. 102 (b), applicants arguments have been considered but are not persuasive. Applicant bases his arguments on the fact that Chau allegedly does not disclose "executing a debug analysis on the compressed image picture." The examiner disagrees, the examiner is required to give the claims their broadest reasonable interpretation. The examiner asserts that any handling of errors constitutes a debug analysis. Therefore the "handling of errors" in Chau as cited in the previous action and discussed on page 5 of applicants arguments qualify as a debug analysis. Applicant also argues that "in Chau the coding and decoding all relates to the bit stream, but not the picture." However this argument cannot be persuasive since the bit steam is of a compressed pictures as also discussed in applicants arguments (P, B pictures on page 5.)
4. Regarding the Rejections to claims 3-4 and 9-10 under 35 U.S.C. 103 (1), applicants arguments have been considered but are not persuasive. Applicant claims that the feature "when the variable length decoding unit performs the debug

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analysis on the compressed image picture and finds an error data the compressed image picture is reloaded so as to perform the debug analysis on the picture again". Applicant first argues that Richter cannot remedy the deficiency of Chau because Decoding an MPEG video data bitstream cannot "tolerate some loss of sound and video still maintain an acceptable quality and determine whether there is sufficient time to flag the error and request a retransmission based on the predicted average time delay." The examiner disagrees with this assessment Richter is discussing a scenario where there is no time to retransmit the damaged data in this case Richter correctly asserts that there is no point in retransmitting data that cannot be used and therefore the decoding should be continued without the data. Further more Richter merely states that audio and video may more tolerant to errors then other data forms. It does not claim that there will be perfect reconstruction if there are no errors. However regardless of weather the loss is "tolerable" this is for a situation with cannot retransmit the damaged data in time. Therefore the loss of data must be tolerated. Further more Chau itself suggests discarding data in that slices with errors are "skipped" (see column 2 lines 4-6). Therefore this argument cannot be found persuasive clearly Chau allows for discarded data.

5. Applicant futher argues that Even combined Chau in view of Reichter cannot render the invention obvious because it does not execute a decoding process in pipeline. But later states that there is a decoding pipeline. This argument cannot be found persuasive. The reaming statements under this section refer to elements found in the specification not in the claim and are not relevant to the rejection.

6. Regarding the Regarding the remaining 103(a) rejections these arguments rely on arguments discussed above and are therefore likewise not found persuasive.

***Rejections Under 35 U.S.C. 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2 and 7-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Chau US 5,596,369.
8. Re claim 1 Chau discloses an image decompressing circuit, comprising: a variable length decoding unit (VLD see figure 2 58), for receiving a compressed image picture (coded bit stream see figure 2 column 2 line 56-57) and executing a debug analysis (handling of errors column 2 line 5) on the compressed image picture (macro blocks column 2 line 4), wherein when a result of the debug analysis indicates that the compressed image picture is suitable for a subsequent decoding operation (if there is no error it is decoded column 2 lines 5-6), executing a decoding process in pipeline (column 3 line 27) on the compressed image picture; and an

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image picture recovery unit (everything after the VLD see figure 2), electrically coupled to the variable length decoding unit (note it is clearly electrically coupled see figure 2), for performing an inverse quantization (see element 14 figure 2 column 2 line 59), an inverse discrete cosine transformation (see element 16 figure 2 column 2 line 60) and a motion compensation (column 3 lines 28-29) with a pipeline process (column 3 line 27) after the compressed image picture has been decoded with the pipeline process (column 3 line 27), so as to recover the compressed image picture.

9. Re claim 2 Chau further discloses wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds no error data, the compressed image picture is determined suitable for the subsequent decoding operation (column 2 lines 4-6 note decoding is continued if there is not error it is not continued if there is an error)
10. Re claim 7 Chau discloses A method of decompressing images, comprising:  
receiving a compressed image picture (coded bit stream see figure 2 column 2 line 56-57); executing a debug analysis on the compressed image picture (handling of errors column 2 line 5), wherein when a result of the debug analysis indicates that the compressed image picture is suitable for a subsequent decoding operation (if there is no error it is decoded column 2 lines 5-6), executing a decoding operation on the compressed image picture with a pipeline process (column 3 line 27) ; and performing an inverse quantization, an inverse discrete cosine transformation(see

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element 14 figure 2 column 2 line 59) and a motion compensation with a pipeline process after the compressed image picture has been decoded with the pipeline process, so as to recover the compressed image picture.

11. Re claims 7 and 8 these claims are the method preformed by the apparatus in claims 1 and 2 respectively and are likewise rejected. (See rejections for claims 1 and 2).

***Rejections Under 35 U.S.C. 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 3, 4, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau in view of Richter et al US 5,995,491.
13. Re claim 3 Chau discloses all the elements of claim 1, Chau does not disclose wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds an error data, the compressed image picture is reloaded, so as to perform the debug analysis on the compressed image picture again. Richter discloses wherein when the debug analysis on the data finds an error

data (error is detected column 8 lines 44), the data is reloaded (retransmitted column 8 lines 46), so as to perform the debug analysis on the data again. The motivation to combine is not retransmitting data which will arrive too late" (column 8 lines 47-52). Therefore it is obvious to combine Chau and Richter to reach the aforementioned advantage.

14. Re claim 4 Chau discloses all of the elements of claim 1 Chau does not disclose wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds more than a predetermined number of the error data and there is no sufficient time to reload the compressed image picture, the compressed image picture is aborted. Richter discloses wherein when the variable length decoding unit performs the debug analysis on the data and finds more than a predetermined number of the error data (note if there is any error it is flagged column 8 lines 40-45) and there is no sufficient time to reload the compressed data (column 8 lines 45-50), the compressed data is aborted (ignored column 8 lines 45-50). The motivation to combine is not retransmitting data which will arrive too late" (column 8 lines 47-52). Therefore it is obvious to combine Chau and Richter to reach the aforementioned advantage.

15. Re claims 9 and 10 these claims are the method preformed by the apparatus in claims 3 and 4 respectively and are likewise rejected. (See rejections for claims 3 and 4).



16. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau and Richter in further view of Kramer et al US 6,658,027.
17. Re claim 5 Chau discloses all of the elements of claim 1. Chau does not disclose wherein when the variable length decoding unit performs the debug analysis on the compressed image picture and finds less than a predetermined number of the error data and there is no sufficient time to reload the compressed image picture, the compressed image picture is determined suitable for the subsequent decoding operation.
18. Richter discloses checking to see if there is sufficient time to reload the compressed data (column 8 lines 45-50) combinable for the reasons stated above.
19. Kramer discloses when the debug analysis finds less than a predetermined number (high water mark column 11 lines 35-40) of the error data the compressed image picture (frame column 11 lines 35-40) is determined suitable for the subsequent decoding operation (contains enough relevant information to warrant playback column 11 lines 35-40)
20. Re claims 11 this claims is the method preformed by the apparatus in claim 5 and is likewise rejected. (See rejection for claim 5).

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21. Claims 6 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chau in view of Lavalley et al US 5,267,242.
22. Re claim 6 Chau discloses all of the elements of claim 1 Chu does not disclose wherein the variable length decoding unit can selectively turn on or turn off the debug analysis (ECC logic column 5 lines 5-10) function for the compressed image picture. Lavalley discloses selectively turn on or turn off (column 5 lines 5-10) the debug analysis function for the data. The motivation to combine is that "the ECC logic can be enable or disabled" (ee column 5 lines 5-10).
23. Re claim 12 this claims is the method preformed by the apparatus in claim 5 and is likewise rejected. (See rejection for claim 6).

### **Conclusion**

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Motsinger whose telephone number is 571-270-1237. The examiner can normally be reached on 9-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jingge Wu can be reached on (571)272-7429. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Motsinger  
10/12/2007



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